

AMENDMENTS

IN THE CLAIMS

1-23 Canceled

24. (New) A method for producing a human antibody, said method comprising:

(a) introducing a first polynucleotide into a first mammalian myeloma cell, wherein the first polynucleotide comprises a first amplifiable marker and a sequence encoding a heavy chain polypeptide of a human antibody;

(b) introducing a second polynucleotide into a second mammalian myeloma cell, wherein the second polynucleotide comprises a second amplifiable marker and a sequence encoding a light chain polypeptide of the human antibody;

(c) culturing each of said first and second mammalian myeloma cells separately in the presence of an amplification agent, wherein the first and second amplifiable markers are amplified by the same amplification agent; and

(d) fusing the cultured cells produced by steps (a)-(c) to form a hybrid cell, wherein the hybrid cell expresses the human antibody.

25. (New) The method of claim 24, further comprising:

(e) recovering the multi-component protein from the hybrid cell.

26. (New) The method of claim 24, wherein the first cell expresses an irrelevant light chain and expresses the desired heavy chain prior to fusion with the second cell.

27. (New) The method of claim 24, wherein the first cell and second cell are NS0 cells.

28. (New) The method of claim 24, wherein the first and second amplifiable markers are each dihydrofolate reductase (DHFR), glutamine synthase, or adenosine deaminase.

29. (New) A method for producing a human antibody, said method comprising:

(a) culturing a first recombinant mammalian myeloma cell in the presence of a first amplification agent to produce a first amplified recombinant cell;
wherein the first cell comprises a first polynucleotide comprising a first amplifiable marker and a sequence encoding a heavy chain polypeptide,

(b) culturing a second recombinant mammalian myeloma cell in the presence of a second amplification agent to produce a second amplified recombinant cell;

wherein the second cell comprises a second polynucleotide comprising a second amplifiable marker and a sequence encoding a light chain polypeptide, wherein the first and second amplifiable markers are amplified by the same amplification agent; and

(c) fusing the first and second amplified recombinant mammalian myeloma cells to form a hybrid cell, wherein the hybrid cell expresses a human antibody;
wherein a human antibody is produced.

30. (New) The method of claim 29, further comprising:

(d) recovering the antibody from the hybrid cell.

31. (New) The method of claim 29, wherein the first cell and second cell are NS0 cells.

32. (New) The method of claim 29, wherein the polynucleotide encoding the heavy chain polypeptide and the polynucleotide encoding the light chain polypeptide are obtained from a B-cell or a hybridoma cell, wherein said B-cell or hybridoma cell produce an antibody.

33. (New) The method of claim 29, wherein the first cell expresses an irrelevant light chain and expresses the desired heavy chain prior to fusion with the second cell.

34. (New) The method of claim 29, wherein the first cell expressing the desired heavy chain is selected for one or more desirable characteristics prior to said fusing.

35. (New) The method of claim 29, wherein the second cell expressing the desired light chain is selected for one or more desirable characteristics prior to said fusing.

36. (New) The method of claim 34, wherein said desirable characteristic is a high production rate of the heavy chain.

37. (New) The method of claim 35, wherein said desirable characteristic is a high production rate of the light chain.

38. (New) The method of claim 29, wherein the first and second amplifiable markers are each dihydrofolate reductase (DHFR), glutamine synthase (GS), or adenosine deaminase.